EV052702698

Please type a plus sign (+) inside this box → +

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/191,047
Filing Date	Nov 12, 1998
First Named Inventor	Zuberec
Group Art Unit	2741
Examiner Name	Armstrong, A.
Attorney Docket Number	MS1-286US

Total Number of Pages in This Submission

RECEIVED
MAR 0 8 2002
Technology Center 2600

ENCLOSURES   *(check all that apply)*

☑ Fee Transmittal Form
☐ Fee Attached
☐ Amendment / Reply
☐ After Final
☐ Affidavits/declaration(s)
☐ Extension of Time Request
☐ Express Abandonment Request
☐ Information Disclosure Statement
☐ Certified Copy of Priority Document(s)
☐ Response to Missing Parts/ Incomplete Application
☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Assignment Papers *(for an Application)*
☐ Drawing(s)   Sheets
☐ Licensing-related Papers
☐ Petition
☐ Petition to Convert to a Provisional Application
☐ Power of Attorney, Revocation Change of Correspondence Address
☐ Terminal Disclaimer
☐ Request for Refund
☐ CD, Number of CD(s) _____

Remarks

☐ After Allowance Communication to Group
☐ Appeal Communication to Board of Appeals and Interferences
☑ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)*
☐ Proprietary Information
☐ Status Letter
☐ Other Enclosure(s) *(please identify below):*
Return postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Brian G. Hart, Reg. No. 44,421
Signature	*[signature]*
Date	02-04-2002

CERTIFICATE OF EXPRESS MAILING

I hereby certify that the items listed above as enclosed are being deposited with the U.S. Postal Service as Express Mail, in an envelope addressed to The Commissioner of Patents and Trademarks, Washington, D.C. 20231, on the below-indicated date. The Express Mail No. has also been marked on the listed items.
Express Mail No. EV 052702698

Typed or printed name	Cheryl K. Boies		
Signature	*Cheryl K. Boies*	Date	3/4/2002

EV052702698

FEE TRANSMITTAL
for FY 2002

Patent fees are subject to annual revision.

Complete if Known	
Application Number	09/191,047
Filing Date	Nov 12, 1998
First Named Inventor	Zuberec et al.
Examiner Name	Armstrong, A.
Group Art Unit	2741
Attorney Docket No.	MS1-286US

RECEIVED MAR 0 8 2002 Technology Center 2600

TOTAL AMOUNT OF PAYMENT	($) 320.00

METHOD OF PAYMENT

1. ☑ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 12-0769

Deposit Account Name: Lee & Hayes, PLLC

☑ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:
☐ Check   ☐ Credit card   ☐ Money Order   ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Fee ($)	Small Entity Fee Code	Fee ($)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1) ($)

2. EXTRA CLAIM FEES

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X 18 =	
Independent Claims	- 3** =	X 84 =	
Multiple Dependent		=	

Large Entity Fee Code	Fee ($)	Small Entity Fee Code	Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($)

**"or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Fee ($)	Small Entity Fee Code	Fee ($)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for *ex parte* reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	320
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 320.00

SUBMITTED BY		Complete (if applicable)	
Name (Print/Type)	Brian G. Hart	Registration No. (Attorney/Agent) 44,421	Telephone (509) 324-9256
Signature		Date 03/04/02	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

03/13/2002 JONES31 00000002 120769 09191047
01 FC:120 320.00 CH

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/191,047
Filing Date 11/12/1998
Inventorship..Zuberec et al.
Appellant .... Microsoft Corporation
Group Art Unit 2641
Examiner .... Armstrong, A.
Attorney's Docket No. MS1-286US
Title: Speech Recognition User Interface

APPEAL BRIEF BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

To: **Box Appeal**
Commissioner of Patents and Trademarks
Washington, D.C. 20231

From: Brian G. Hart (Tel. 509-324-9256; Fax 509-323-8979)

Customer No. 22801

22801
PATENT TRADEMARK OFFICE

Pursuant to 37 C.F.R. § 1.192, appellant hereby submits an appeal brief for the subject application within the requisite two-month time period from the date of the notice of appeal, which was filed on January 07, 2002. The Filing Fee of $320.00 as set forth in 37 C.F.R. § 1.17(c), is attached.

Real Party in Interest

The real party in interest comprises Microsoft Corporation, by way of assignment from Zuberec et al. who are the named inventors and are captioned in the present brief.   The assignment document was recorded at Reel/Frame 9609/0977 in the United States Patent and Trademark Office on 11/12/1998.

Related Appeals and Interferences

None.

Status of the Claims

Claims 1, 3-9, 11-18, 20-35, 37 and 39 are pending.

Status of Amendments

No amendment has been filed subsequent to the final rejection.

Summary

A speech recognition system (SR) 20 of Fig. 1 is disclosed that includes an application 22, a vocabulary 24 accessible by the application 22 that holds a set of utterances applicable to the application, and a speech recognition engine 28 to recognize the utterances in the vocabulary 24. The speech recognition engine 28 is configured to actively listen and recognize an utterance for a predetermined response time. If the speech engine 28 does not recognize an utterance within the predetermined amount of time, the speech recognition engine enters a dormant state, and remains in the dormant state until a starter word from the vocabulary 24 is recognized.

The application 22 includes a user interface 30 to provide both visual and auditory speech recognition engine 28 feedback to guide a user in a casual, eyes-off environment such as in a motor vehicle (see, the in-dash accessory 50 of Fig. 2, and the specification, page 9, line 14 through page 12, line 3). Specifically, the user interface 30 provides feedback to inform the user when the speech

2

recognition engine 28 is awaiting vocal input and to indicate whether the speech recognition engine 28 recognizes an utterance from the vocabulary 24.

For instance, the user interface 30 includes an audio sound or speech generator 158 of Fig. 4 that produces three distinct sounds: a SR "on" sound signifying that the system is on and actively awaiting vocal input; an "off" sound indicating that the SR system is off and in a sleep mode; and a "confirm" sound noting that an utterance has been recognized. The "on" sound is triggered by a key "wake up" command or by depression of button (see, the specification, page 8, lines 3-20). Once awake, the speech recognition engine 28 expects to receive an utterance from the active vocabulary 26, which is part of the vocabulary 24, within a predetermined response time. The "confirm" sound signals the start of the response time. If the response time lapses before a recognizable utterance is entered, the "off" sound is played.

The user interface 30 further includes a visual component in the form of a graphic that changes with the tolling of the response period. In one implementation, the count graphic 310 of Figs. 7a through 7c is a progress bar that counts down or shortens in proportion to the diminishment of the response period. When the response time runs out, the progress bar disappears entirely. On the other hand, if the speech engine 28 recognizes an utterance within the response period, the user interface 30 plays the "confirm" sound and restarts the countdown graphic 310. The user interface 30 may also temporarily change the color of the graphic 310 elements from one color to another and then back to the original color to reflect a correct voice entry.

3

The user interface 30 may also be used in distributed collaboration efforts to facilitate conversations between remotely located people (see, the specification, page 14, line 17 through page 15, line 3). The visual display of Figs. 7a through 7c tells a user when they can speak and how long they can speak before their turn "times out."

Issues Presented

1. Whether claims 1, 3, 6, 9, 13, 14, 16-18, 21-28, 31, 33-34, and 39 are properly rejected under 35 USC §103 as being unpatentable over U.S. Patent No. 6,018,711 to French St. George et al. (hereafter referred to as "St. George") in view of U.S. Patent No. 5,774,841 to Salazar et al. (hereinafter referred to as "Salazar").

2. Whether claims 4-5, 7-8, 11-12, 15, 20, 29-30, 32, 35, and 37 are properly rejected under 35 USC §103 as being unpatentable over St. George in view of Salazar as applied to claims 1, 9, 18, 23, 27, and 34, and further in view of U.S. Patent No. 6,075,534 to VanBuskirk et al. (hereinafter referred to as "VanBuskirk"). Appellant respectfully traverses this rejection.

Grouping of Claims

The six (6) groups of pending claims listed below respectively stand or fall together:

1. Claims 1, 3, 5-6, 9, 12-14, 16-18, 20-26 stand or fall together.

2. Claims 4 and 11 stand or fall together.

3. Claims 7, 8, and 15 stand or fall together.

4. Claims 27-32 stand or fall together.

5. Claim 33 stands or falls by itself.

6. Claims 34-39 stand or fall together.

Argument

CLAIMS 1, 3, 6, 9, 13, 14, 16-18, 21-28, 31, 33-34, and 39 ARE NOT OBVIOUS OVER ST. GEORGE IN VIEW OF SALAZAR IN CONFORMITY WITH 35 U.S.C. §103(A).

Claims 1, 3-9, 11-18, 20-35, 37 and 39 stand rejected under 35 USC §103 as being unpatentable over St. George in view of Salazar. The appellant traverses this rejection.

Claim 1 recites "a speech recognition engine to recognize an utterance", "the speech recognition engine being configured to actively listen for the utterance for a predetermined response time".

In support of the obviousness rejection, the 12/19/2002 advisory action, on page 2 argues that St. George teaches that "the time between the listening time and the machine response time is a minimal and therefore the speech recognition system can process the speech within the allowed input time." However, this is contrary to the express teaching of St. George.

Specifically, St George teaches a system that delays sending a user's speech input to a speech recognition engine for analysis until after the user has had an opportunity to review, edit, and/or delete the input. (E.g., see St. George's

Abstract). St George teaches that this opportunity to review and change speech input before it is sent for speech recognition reduces the chance that invalid inputs will cause the system to advance to an erroneous state. Specifically, St. George teaches that the user is allowed to input speech signals, and edit or delete these signals for a bounded (but extendable) window of time. (St. George at col. 8, lines 24-30). Only after the bounded window of time expires does St. George send "the aggregated speech sample" for speech recognition.

Thus, even though St. George's uses the words "recognition window" to describe the bounded amount of time that the user has to input, edit, and/or delete speech signals, St. George does not interpret or "recognize" anything while speech input is being gathered. Instead, St. George at most teaches that audio signals are accepted during this "recognition window" and not sent for actual speech recognition until after the amount of time allotted to the "recognition window" has expired. Additionally, the appellant respectfully submits, that the speech recognition engine of St. George, after receiving any aggregated speech sample (i.e., after the window of time for providing, editing, and/or deleting the aggregate speech sample has closed), may take an infinite amount of time to recognize the contents of the received aggregated speech sample. This is especially the case since St. George does not teach or suggest any time limitation to understand (i.e., recognize) speech input.

For each of these reasons, the advisory action's assertion that "the time between the listening time and the machine response time is a minimal and therefore the speech recognition system can process the speech within the allowed input time" is contrary to the express teaching of St. George.

6

Moreover, the combination of St. George in view of Salazar does not cure the discussed deficiencies of St. George for the following reasons.

As already noted, St. George teaches a system wherein no speech is recognized during the speech input response time. This is so a user will have the opportunity to edit or delete the speech input to avoid sending invalid speech data to the speech recognition engine—possibly causing an erroneous state. In light of this, the appellant respectfully submits, that the ACTION's suggested modification to St. George's system with Salazar's system, which provides user feedback as to whether the speech recognition system recognizes user input, would require the speech recognition engine to interpret speech data as it was being input. Yet, this suggested modification proposes exactly what St. George teaches against and avoids. Rather than interpreting speech input as it is received, as the modification inherently proposes, St. George chooses instead to allow the user to edit and/or delete aggregated speech input before sending it for speech recognition. This reduces the possibility that invalid data (e.g., unrecognizable speech) will be sent to the speech recognition engine.

Accordingly, this teaching of Salazar is contrary to the express teaching of St. George, which goes to great lengths to avoid sending any speech input to the speech recognition engine until the user has had the opportunity to edit or delete aggregated speech input. For these reasons, a person ordinary skill in the art at the time of invention would not have combined Salazar with St. George to arrive at appellant's claimed features.

Furthermore, even if Salazar was an appropriate reference in combination with St. George under 35 U.S.C. 103(a), which appellant respectfully submits—is

not, the cited combination does not teach or suggest the recited features of claim 1. Specifically, Salazar teaches using a voice file to initialize a speech recognition system based on the speech particularities of a particular user. Once activated, the speech system of Salazar is always ready to receive speech input. Thus, Salazar does not teach or suggest "the speech recognition engine being configured to actively listen for the utterance for a predetermined response time". Rather, until Salazar's system is either manually or verbally inactivated (i.e., an inactivate command spoken by the user), Salazar's speech engine may wait for just about any amount of time, including an infinite amount of time to recognize the user's speech input. (E.g., see Salazar, col. 8, lines 1-3). Waiting an infinite amount of time to receive speech input is clearly not "a predetermined amount of time" within the context of claim 1—especially since claim 1 further recites "the speech recognition engine being configured to enter a dormant state if the utterance is not recognized within the predetermined amount of time".

Claim 1's further recited feature of "the speech recognition engine being configured to enter a dormant state if the utterance is not recognized within the predetermined amount of time" was also addressed by the final office action dated October 10, 2001 (hereinafter referred to as the "ACTION"). Specifically, on page 5 of the ACTION admits that St. George in view of Salazar does not teach or suggest "...sleep mode...awakened to an active mode upon detection of a starter utterance". Yet, the ACTION does not point out or provide any other evidence as to how the references teach or suggest the appellant's claimed features. Since data modifying the references of record in furtherance of the rejection are not specific

or otherwise supported, the appellant respectfully requests further evidentiary support from the office to support this rejection.

Moreover, even in view of the lack of evidentiary support of this rejection, the appellant respectfully submits that nowhere do the references of record teach or suggest this recited feature of claim 1. For instance, as already discussed, St. George does not teach or suggest any speech recognition engine that is inactivated if it does not understand (i.e., recognize) any of the aggregated speech samples that are communicated to it. At most, with respect to limited amounts of time, St. George teaches that the user has only a specific amount of time to provide, edit, and/or delete speech signals—and this limitation is enforced before any speech signals are even communicated to the speech recognition engine. Additionally, once Salazar's system is activated and to receive speech input, Salazar system will wait for speech input, regardless of whether or not the speech input is recognized, until Salazar's system is either manually or verbally shut down (e.g., see Salazar, col. 8, lines 1-3). Thus, the references of record do not teach or suggest "the speech recognition engine being configured to enter a dormant state if the utterance is not recognized within the predetermined amount of time", as the appellant claims.

Claim 1 further recites "a user interface to [...] display a countdown graphic that changes with lapsing of the predetermined response time" and "restart the countdown graphic in the event the speech recognition engine recognizes the utterance." In addressing this feature, the ACTION on page 3 concedes that neither St. George nor Salazar teach or suggest this recited feature. Yet, even in view of this admitted lack of teaching, the ACTION concludes that it would have

been obvious to further modify the St. George in view of Salazar because such a modification would "continually grant the user maximum response time for generating an utterance to be recognized". The appellant respectfully disagrees.

For the reasons already discussed, St. George explicitly teaches that no speech is interpreted until after the window of time for receiving verbal signals has expired. St. George further teaches that a user resets *the window of time* for receiving speech input by providing tactile input such as a user button or key press. Nowhere does St. George teach or suggest "restart the countdown graphic in the event the speech recognition engine recognizes the utterance", as appellant claims.

Moreover, Salazar's teaching of visual or audio feedback in response to the receipt of voice input does not cure this deficiency of St. George. Although, Salazar teaches providing visual or audio indications corresponding to whether speech input is recognized, Salazar is completely silent with respect to providing any visual feedback changing with lapsing of a predetermined response time, wherein the visual feedback is restarted when speech input is recognized. Rather, since neither Salazar or St. George teach or suggest any requirement to receive recognizable speech input within a predetermined amount of time as appellant does claim, it is highly unlikely that a person of ordinary skill in the art at the time of invention would have ever made such a modification to St. George, even in view of Salazar.

For each of the above reasons, the references of record singly or in combination do not teach or suggest the features of claim 1. Accordingly, the 35 U.S.C. 103(a) rejection of claim 1 is improper and should be overruled.

Claims 3 and 6 depend from claim 1 and are patentably distinguished over the references of record by virtue of this dependency. Accordingly, the 35 USC §103 rejection of claims 3 and 6 should be overruled.

Claim 9 recites:

> "[...] a grammar that holds a subset of the utterances in the vocabulary;
>
> a speech recognition engine to recognize the utterances in the grammar within a predetermined response time, the speech recognition engine being configured to enter a dormant state if the utterances are not recognized within the predetermined response of time; and
>
> a user interface to display a countdown graphic that changes with lapsing of the response time, wherein the user interface restarts the countdown graphic in the event the speech recognition engine recognizes the one of the utterances."

For the reasons discussed above in reference to claim 1, the references of record, singly or in combination, do not teach or suggest the various features of claim 9.

Accordingly, the 35 USC §103 rejection of claim 9 should be overruled.

Claims 13, 14, 16, and 17 depend from claim 9 and are patentably distinguished over the references of record by virtue of this dependency. Accordingly, the 35 USC §103 rejection of claims 13, 14, 16, and 17 should be overruled.

Claim 18 recites:

> "[...] a graphic progress bar shown on the display that indicates a response time in which the speech recognition system is awaiting a user to speak, the progress bar shortening with passage of the response time, wherein the graphic progress bar is lengthened to its initial position after each recognized user input, wherein the user interface plays an audible sound when the speech recognition engine recognizes one of the utterances within the predetermined response time, and wherein the user interface indicates that the

speech recognition engine is in a dormant state when at least one of the utterances is not recognized within the predetermined response of time."

For the reasons already discussed, the references of record, singly or in combination, do not teach or suggest these features of claim 18.

Accordingly, the 35 USC §103 rejection of claim 18 should be overruled.

Claims 21 and 22 depend from claim 18 and are patentably distinguished over the references of record by virtue of this dependency.

Accordingly, the 35 USC §103 rejection of claims 21 and 22 should be overruled.

Claim 23 recites

"[...] a graphic shown on the display that indicates a fixed response time in which the speech recognition system is awaiting receipt of an utterance via the audio input, the graphic diminishing in size with the passage of time, the graphic returning to an original size after each recognized utterance; and

an audio generator to emit a first audible sound when the speech recognition system recognizes the utterance, the audio generator being further configured to emit a second audible sound when the fixed response time has expired before the utterance has been recognized, the second sound indicating that the speech recognition system has entered a dormant state."

For the reasons already discussed, the references of record, singly or in combination, do not teach or suggest these features of claim 23. Accordingly, the 35 USC §103 rejection of claim 23 should be overruled.

Claims 24-26 depend from claim 23 and are patentably distinguished over the references of record by virtue of this dependency. Accordingly, the 35 USC §103 rejection of claims 24-26 should be overruled.

Claim 27 recites:

"A vehicle computer system comprising:

a computer;

an open platform operating system executing on the computer, the operating system being configured to support multiple applications; and

a speech recognition system to detect utterances used to control at least one of the applications running on the computer, the speech recognition system having a user interface to provide visual and auditory feedback indicating whether an utterance is recognized, the user interface being configured to play a first audible sound indicating recognition of the utterance and to display a graphic that diminishes in size from an original size with the passage of time, the graphic returning to the original size after each recognized utterance, the user interface being further configured to emit a second audible sound when a predetermined response time has expired before the utterance has been recognized, the second

13

sound indicating that the speech recognition system has entered a dormant state."

For the reasons already discussed, the references of record, singly or in combination, do not teach or suggest these features. Accordingly, for these reasons alone, the 35 USC §103 rejection of claim 27 should be overruled. Accordingly, for this additional reason, the 35 USC §103 rejection of claim 27 should be overruled.

Claims 28 and 31 depend from claim 27 and are patentably distinguished over the references of record by virtue of this dependency. Accordingly, the 35 USC §103 rejection of claims 28 and 31 should be overruled.

Claim 33 recites:
> *"A collaboration system involving multiple interconnected devices comprising:*
> *a voice input mechanism resident at each of the devices;*
> *an audio output system resident at each of the devices; and*
>
> *a user interface to provide visual and auditory feedback indicating when a party located at one of the devices can speak, the user interface being configured to play an audible sound when the party can begin speaking and to display a graphic that changes with lapsing of time to indicate a duration that the party can speak, the graphic diminishing in size from an original size with the passage of time, the graphic returning to the original size after each recognized utterance, wherein the user interface plays an audible sound upon recognizing an utterance within the duration that the party can speak, the user interface emitting a second audible sound when the duration has expired before the utterance has been recognized, the second sound indicating that the speech recognition system has entered a dormant state."*

For the reasons already discussed, the references of record, singly or in combination, do not teach or suggest these features. Accordingly, for these reasons alone, the 35 USC §103 rejection of claim 33 should be overruled.

Claim 34 recites "changing the graphic to indicate passage of the response time such that the graphic diminishes in size from an original size with the passage of time", and "responsive to recognizing an utterance, presenting the graphic in the original size". For the reasons discussed above in reference to claim 1, the references of record, singly or in combination, do not teach or suggest this feature of claim 34.

Additionally, claim 34 recites "responsive to expiration of the response time before the audible utterance has been recognized, emitting a second sound to indicate that the speech recognition system has entered a dormant state." For the reasons discussed above in reference to claim 1, the references of record, singly or in combination, do not teach or suggest this feature of claim 34.

Moreover, nowhere do the references of record teach "playing a first sound when an audible utterance is recognized" and "emitting a second sound to indicate that the speech recognition system has entered a dormant state." If this feature is again rejected, the appellant respectfully requests for the office to point out where this feature is taught or suggested in the references.

Accordingly, for each of these reasons, the 35 USC §103 rejection of claim 34 should be overruled.

Claim 39 depends from claim 34 and is allowable over the references of record by virtue of this dependency. Accordingly, the 35 USC §103 rejection of claim 39 should be overruled.

CLAIMS 4-5, 7-8, 11-12, 15, 20, 29-30, 32, 35, and 37 ARE NOT OBVIOUS OVER ST. GEORGE IN VIEW OF SALAZAR AND FURTHER IN VIEW OF VANBUSKIRK IN CONFORMITY WITH 35 U.S.C. §103(A).

Claims 4-5, 7-8, 11-12, 15, 20, 29-30, 32, 35, and 37 stand rejected under 35 USC §103(a) as being unpatentable over St. George in view of Salazar as applied to claims 1, 9, 18, 23, 27, and 34, and further in view of VanBuskirk. The appellant respectfully traverses this rejection.

Claims 4, 11, 20, 29, and 37 depend from one of claims 1, 9, 18, 27, or 34. For the respective reasons discussed above, in reference to claims 1, 9, 18, 27, and 34, dependent claims 4, 11, 20, 29, and 37-by virtue of their respective dependency on an allowable base claim, are allowable over St. George in view of Salazar.

Claim 4 recites "wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the speech recognition engine recognizes the utterance." Claim 11 recites "wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the speech recognition engine recognizes one of the utterances." Claim 20 recites "graphic progress bar briefly changes color when a user input is recognized." Claim 29 recites "wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the utterance is recognized." And, claim 37 recites "changing a color of the graphic when an audible utterance is recognized."

In addressing these claims, the ACTION on page 4 concedes that neither St. George nor Salazar alone or in combination teach or suggest "..interface displays visual elements in a first color..." Instead, the ACTION relies on VanBuskirk's

16

teaching of a status bar that changes color to represent volume level of dictated speech to conclude it would have been obvious to modify St. George in view of Salazar to incorporate the status bar of VanBuskirk to provide a user with an additional option to monitor input response time. The appellant respectfully disagrees with this conclusion of obviousness for the following reasons.

As already discussed above, St. George teaches a system wherein nothing is recognized during the speech input response time. This is so a user will have the opportunity to edit or delete the speech input to avoid sending erroneous data to the speech recognition engine. In light of this, the appellant respectfully submits, that the ACTION's suggested modification to St. George (i.e., incorporate the status bar of VanBuskirk to provide a user with an additional option to monitor input response time) would require the speech recognition engine to interpret speech data as it was being input. However, as discussed above with respect to the combination St. George in view of Salazar, this is exactly what St. George teaches against and avoids, choosing instead to allow the user to edit the and/or delete aggregated speech input before it is sent for speech recognition. For these reasons, a person ordinary skill in the art at the time of invention would have not would not have made the ACTION's proposed modification to St. George in view of Salazar and further in view of VanBuskirk.

For these reasons, the cited combination does not teach or suggest the features of claims 4, 11, 20, 29, and 37. Accordingly, the 35 USC §103 rejection of claims 4, 11, 20, 29, and 37 should be overruled.

Claims 5, 12, 30, and 35 depend from one of claims 1, 9, 18, 27, or 34. For the respective reasons discussed above, in reference to claims 1, 9, 18, 27, and

34, dependent claims 5, 12, 30, and 35-by virtue of their respective dependency on an allowable base claim, are allowable over St. George in view of Salazar.

Additionally, in addressing these claims, the action on page 5 admits that neither St. George nor Salazar teach or suggest "countdown bar comprises a progress bar". Instead, the Office relies on VanBuskirk's status bar that graphically represents change in volume level of dictated speech to conclude it would have been obvious to modify St. George in view of Salazar to incorporate the status bar of VanBuskirk to provide a user with an additional option to monitor input response time. However, for the reasons already discussed above with respect to claims 4, 11, 20, 29, and 37, a person ordinary skill in the art at the time of invention would have not would not have made the ACTION's proposed modification to St. George in view of Salazar and further in view of VanBuskirk.

Accordingly, the 35 USC §103 rejection of claims 5, 12, 30, and 35 should be overruled.

Claims 7, 15, and 32 depend from one of claims 1, 9, or 27. For the respective reasons discussed above, in reference to claims 1, 9, and 27, dependent claims 7, 15, and 32-by virtue of their respective dependency on an allowable base claim, are allowable over St. George in view of Salazar.

In addressing these claims, the ACTION concedes that neither St. George nor Salazar teach or suggest "a sleep mode and is awakened to an active mode upon detection of a starter utterance", as respectively recited by these claims. Instead, the ACTION relies on VanBuskirk's status bar (indicating that a system is not active and can be awakened with a proper voice command or by manual means) to conclude that the features of these claims are obvious in view of the cited

combination. However, combining VanBuskirk's status bar with St. George in view of Salazar does not cure the above-discussed deficiencies of St. George in view of Salazar. Therefore, the cited combination does not teach or suggest the features of claims 7, 15, and 32.

Accordingly, the 35 USC §103 rejection of claims 7, 15, and 32 should be overruled.

Claim 8 depends from claim 1 and for the reasons discussed above is allowable over St. George in view of Salazar by virtue of this dependency.

In addressing this claim, the ACTION admits that St. George in view of Salazar does not teach or suggest the features of claim 8. Instead, the ACTION relies on VanBuskirk' teaching of status information to indicate that a system is in a sleep mode that can be activated responsive to a command (or manual means) to conclude that the features of claim 8 are obvious. The appellant disagrees. VanBuskirk's status information and sleep mode that may be activated by a command (or manual means) in combination with St. George in view of Salazar does not cure the above-discussed deficiencies of St. George in view of Salazar. Therefore, the cited combination does not teach or suggest the features of claim 8.

Accordingly, the 35 USC §103 rejection of claim 8 should be overruled.

Conclusion

The Appellant respectfully considers this application to be in condition for allowance and respectfully requests the Board to overturn the final rejection and that the office pass this application to allowance.

This brief is being submitted in triplicate.

Respectfully submitted,

Date: 03/04/02

By: _Brian Hart_
Brian G. Hart
Reg. No. 44,421
(509) 324-9256

LEE & HAYES PLLC
421 W. Riverside Ave
Suite 500
Spokane, WA 99201

X. APPENDIX A: CLAIMS ON APPEAL

1. (Once Amended) A speech recognition system comprising:

a speech recognition engine to recognize an utterance, the speech recognition engine being configured to actively listen for the utterance for a predetermined response time, the speech recognition engine being configured to enter a dormant state if the utterance is not recognized within the predetermined amount of time, the speech recognition system remaining in the dormant state until recognition of a starter word that is independent of the utterance; and

a user interface to provide visual and auditory feedback indicating whether the speech recognition engine recognizes the utterance, the user interface being configured to: (a) play an audible sound indicating recognition of the utterance; (b) display a countdown graphic that changes with lapsing of the predetermined response time; (c) restart the countdown graphic in the event the speech recognition engine recognizes the utterance.

3. (Unchanged) A speech recognition system as recited in claim 1, wherein the response time is configurable.

4. (Unchanged) A speech recognition system as recited in claim 1, wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the speech recognition engine recognizes the utterance.

5. (Unchanged) A speech recognition system as recited in claim 1, wherein the countdown graphic comprises a progress bar that shortens as the response time diminishes.

6. (Unchanged) A speech recognition system as recited in claim 1, wherein the user interface plays another audible sound when the response time has elapsed.

7. (Unchanged) A speech recognition system as recited in claim 1, wherein the speech recognition engine is initially in a sleep mode and is awakened to an active mode upon detection of a starter utterance, the user interface plays another audible sound indicating that the speech recognition engine is in the active mode in the event the speech recognition engine recognizes the starter utterance.

8. (Once Amended) A speech recognition system as recited in claim 1, wherein the speech recognition engine is initially in a sleep mode and is awakened to an active mode upon depression of a button, the user interface plays another audible sound indicating that the speech recognition engine is in the active mode in the event the speech recognition engine recognizes a starter utterance.

9.   (Twice Amended) A speech recognition system comprising:

an application;

a vocabulary accessible by the application, the vocabulary holding a set of utterances applicable to the application;

a grammar that holds a subset of the utterances in the vocabulary;

a speech recognition engine to recognize the utterances in the grammar within a predetermined response time, the speech recognition engine being configured to enter a dormant state if the utterances are not recognized within the predetermined response of time; and

a user interface to display a countdown graphic that changes with lapsing of the response time, wherein the user interface restarts the countdown graphic in the event the speech recognition engine recognizes the one of the utterances.

11.   (Unchanged) A speech recognition system as recited in claim 9, wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the speech recognition engine recognizes one of the utterances.

12.   (Unchanged) A speech recognition system as recited in claim 9, wherein the countdown graphic comprises a progress bar that shortens as the response time diminishes.

13.   (Once Amended) A speech recognition system as recited in claim 9, wherein the user interface plays an audible sound when the speech recognition engine recognizes one of the utterances within the predetermined response time.

14.   (Unchanged) A speech recognition system as recited in claim 9, wherein the user interface plays an audible sound when the response time has elapsed.

15.   (Unchanged) A speech recognition system as recited in claim 9, wherein the speech recognition engine is initially in a sleep mode and is awakened to an active mode upon detection of a starter utterance, the user interface plays another audible sound indicating that the speech recognition engine is in the active mode in the event the speech recognition engine recognizes the starter utterance.

16.   (Unchanged) An entertainment system incorporating the speech recognition system as recited in claim 9.

17.   (Unchanged) A computing device incorporating the speech recognition system as recited in claim 9.

18. (Twice Amended) A user interface for an speech recognition system, the user interface comprising:

a display; and

a graphic progress bar shown on the display that indicates a response time in which the speech recognition system is awaiting a user to speak, the progress bar shortening with passage of the response time, wherein the graphic progress bar is lengthened to its initial position after each recognized user input, wherein the user interface plays an audible sound when the speech recognition engine recognizes one of the utterances within the predetermined response time, and wherein the user interface indicates that the speech recognition engine is in a dormant state when at least one of the utterances is not recognized within the predetermined response of time.

20. (Unchanged) A user interface as recited in claim 18, wherein the graphic progress bar briefly changes color when a user input is recognized.

21. (Unchanged) A speech recognition system incorporating the user interface as recited in claim 18.

22. ˟ (Unchanged) A computing device incorporating the user interface as recited in claim 18.

23.   (Once Amended) A user interface for an speech recognition system, the user interface comprising:

a display;

an audio input to receive audible utterances;

a graphic shown on the display that indicates a fixed response time in which the speech recognition system is awaiting receipt of an utterance via the audio input, the graphic diminishing in size with the passage of time, the graphic returning to an original size after each recognized utterance; and

an audio generator to emit a first audible sound when the speech recognition system recognizes the utterance, the audio generator being further configured to emit a second audible sound when the fixed response time has expired before the utterance has been recognized, the second sound indicating that the speech recognition system has entered a dormant state.

24.   (Unchanged) A user interface as recited in claim 23, wherein the audio generator emits a second audible sound when the speech recognition system fails to recognize the utterance within the response time.

25.   (Unchanged) A speech recognition system incorporating the user interface as recited in claim 23.

26.   (Unchanged) A computing device incorporating the user interface as recited in claim 23.

27.   (Once Amended) A vehicle computer system comprising:

a computer;

an open platform operating system executing on the computer, the operating system being configured to support multiple applications; and

a speech recognition system to detect utterances used to control at least one of the applications running on the computer, the speech recognition system having a user interface to provide visual and auditory feedback indicating whether an utterance is recognized, the user interface being configured to play a first audible sound indicating recognition of the utterance and to display a graphic that diminishes in size from an original size with the passage of time, the graphic returning to the original size after each recognized utterance, the user interface being further configured to emit a second audible sound when a predetermined response time has expired before the utterance has been recognized, the second sound indicating that the speech recognition system has entered a dormant state.

28.   (Unchanged) A vehicle computer system as recited in claim 27, wherein the user interface restarts the graphic in the event the utterance is recognized.

29. ` (Unchanged) A vehicle computer system as recited in claim 27, wherein the user interface displays visual elements in a first color and briefly changes to a second color in the event the utterance is recognized.

30.   (Unchanged) A vehicle computer system as recited in claim 27, wherein the graphic comprises a progress bar that shortens as the response time passes.

31.   (Unchanged) A vehicle computer system as recited in claim 27, wherein the user interface plays another audible sound when the response time has elapsed.

32.   (Unchanged) A vehicle computer system as recited in claim 27, wherein the speech recognition system is initially in a sleep mode and is awakened to an active mode upon detection of a starter utterance, the user interface plays another audible sound indicating that the speech recognition system is in the active mode in the event the starter utterance is recognized.

33.   (Twice Amended) A collaboration system involving multiple interconnected devices comprising:

a voice input mechanism resident at each of the devices;

an audio output system resident at each of the devices; and

a user interface to provide visual and auditory feedback indicating when a party located at one of the devices can speak, the user interface being configured to play an audible sound when the party can begin speaking and to display a graphic that changes with lapsing of time to indicate a duration that the party can speak, the graphic diminishing in size from an original size with the passage of time, the graphic returning to the original size after each recognized utterance, wherein the user interface plays an audible sound upon recognizing an utterance within the duration that the party can speak, the user interface emitting a second audible sound when the duration has expired before the utterance has been recognized, the second sound indicating that the speech recognition system has entered a dormant state.

34. (Twice Amended) A method for operating a speech recognition system, comprising the following steps:

initiating a response time in which to receive an audible utterance;

displaying a graphic representing the response time;

playing a first sound when an audible utterance is recognized;

changing the graphic to indicate passage of the response time such that the graphic diminishes in size from an original size with the passage of time;

responsive to recognizing an utterance, presenting the graphic in the original size; and

responsive to expiration of the response time before the audible utterance has been recognized, emitting a second sound to indicate that the speech recognition system has entered a dormant state.

35. (Unchanged) A method as recited in claim 34, wherein the displaying and changing steps comprise the steps of depicting a progress bar and shortening the progress bar as the response time passes.

37. (Unchanged) A method as recited in claim 34, further comprising the step of changing a color of the graphic when an audible utterance is recognized.

39. (Unchanged) A method as recited in claim 34, further comprising the step of playing a sound when no audible utterance is recognized within the response time.